

Q1 2017

AFRICA INVESTMENT REVIEW





Contents

- 1 Global and African Economic Outlook
- 2 Commodities Outlook
- 3 Digital Financial Services in Africa
- 4 The Water-Energy-Food Nexus and Sustainability
- 5 Key Data on Africa

Editorial Board

Prof Mthuli Ncube (Managing Director, Head of Quantum Global Research Lab)
Sandra Vetter Sloan (Group Head of Marketing and Communication)
Dr Jeremy Wakeford (Senior Economist)
Dr Seedwell Hove (Senior Economist)
Dr Fernando Barbi (Senior Economist)
Lacina Balma (Research Economist)
Orn lie Manzambi (Associate Economist)
Milton Delo (Associate Economist)

Contacts: m.ncube@quantumglobalgroup.com
s.sloan@quantumglobalgroup.com

Design production: Dirlene L pez, Marketing Officer

www.quantumglobalgroup.com



"The Research Lab is positioned to deliver research excellence that will drive effective policy making and value-maximising investment decisions, all which will contribute to the achievement of inclusive growth. After all, the drivers of inclusive growth are the source of some of the best investment opportunities".

AFRICA INVESTMENT REVIEW

Foreword

Africa has experienced significant inflows in investment over the last decade. This has been driven by the positive economic growth outlook; favorable sovereign credit ratings and 'doing business rankings'; the upward commodity price trends, until 2014 when the commodity prices fell significantly; attractive sectors such as mobile telephony; demographics; infrastructure investment; urbanization; among other factors. The continued inflows in foreign investment hinge on the recovery in commodity prices, the quality of macroeconomic management, and the impact of de-globalization as captured by the inward-looking policies being promoted under President Trump in the US and under Brexit in the UK.

This first edition of the **Africa Investment Review (AIR)** from Quantum Global Group showcases some of the macroeconomic as well as sector specific research we undertake. The focus of this first edition lies on the economic outlook of Africa within a global context, the commodities outlook, digital financial services, and the water-energy-food nexus and sustainability.

Digital financial services have grown significantly on the back of the growth in mobile-telephony and the size of the unbanked population in Africa – so much in fact, that Africa today leads the world in mobile-banking. This area presents investment opportunities, and promises to transform banking and financial inclusion in Africa. Understanding the water-energy-food nexus is important, as most of agriculture is rain-fed and food supply depends on rain patterns. At the same time, climate change has produced droughts in some parts, while other parts experience floods, as is the case in East and Southern Africa in 2016 and 2017. Droughts negatively impact the supply of hydropower energy for rivers and dams, while floods also destroy food crops but fill up the dams with water. Clearly, strategies that acknowledge this water-food-energy nexus will go a long way in creating sustainability in these three connected areas.

The **Africa Investment Review** also offers a set of key data on Africa on economic growth, public debt, currency movements, current account, sovereign bond yields, credit ratings, oil price trend, and other economic indicators.

We hope the **Africa Investment Review** provides some useful insights and look forward to establishing it as an indispensable tool for investors in Africa.

Prof Mthuli Ncube

Managing Director,
Head of Quantum Global Research Lab

African Economic Outlook

By Dr Seedwell Hove, Quantum Global Research Lab

Sub-Saharan Africa (SSA) is starting 2017 with renewed optimism, as economic growth is expected to rebound, following a slowdown of 1.5% in 2016. We expect SSA growth to pick up to over 3% in 2017, well above the global average of 2.7%. IMF estimates suggest that SSA growth in 2017 will even be more upbeat at 5% when Nigeria and South Africa are excluded. About 20 SSA countries will expand at rates above 5%. Growth will be driven by a pickup in global demand, modest recovery in oil prices (to about \$55-\$60 range in 2017) and other commodity prices as well as increased infrastructure spending in many countries.

The region's large economies (Nigeria, South Africa and Angola) which have dragged down SSA growth in 2016 seem to have bottomed out and are on a recovery path. The Nigerian economy contracted by 1.7% in 2016 and is expected to exit recession and expand at 1% in 2017, lifted up by improving oil prices, increase in oil production, large infrastructure spending (about \$30 billion), and gradual rebalancing of the foreign exchange market following the float of the Naira in June 2016.

South Africa's prospects are strengthening, with growth of 0.8% in 2017, after a mediocre 0.3% in 2016, as external demand gradually improves, commodity prices firm and drought shocks dissipate. However, the raucous political tensions in the ANC party, lackluster labour market and uncertainties in the US trade policies could weigh on the prospects. The outlook for Angola is improving, with growth expected at 1.5% in 2017, benefiting from stabilising oil prices and increased public infrastructure spending in the run up to elections, but continued imbalances in the foreign exchange markets, rising inflation (42% by December 2016) and higher debt service obligations could hamper further recovery.

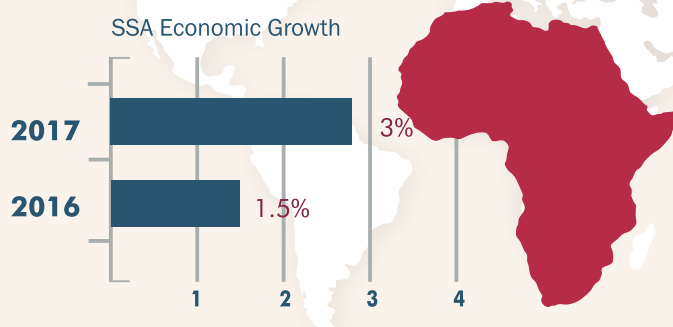
Growth rates of selected African countries

Some frontier market economies such as Cote d'Ivoire, Kenya and Senegal which grew at robust paces in 2016 will maintain their strong growth momentum in 2017. These economies are less resource intensive, relatively more diversified, net importers of oil and have improved business environment. Cote d'Ivoire will

likely be the fastest growing economy in 2017, with 8% growth, bolstered by a strong infrastructure programme, dynamic private sector and extensive international financial support.

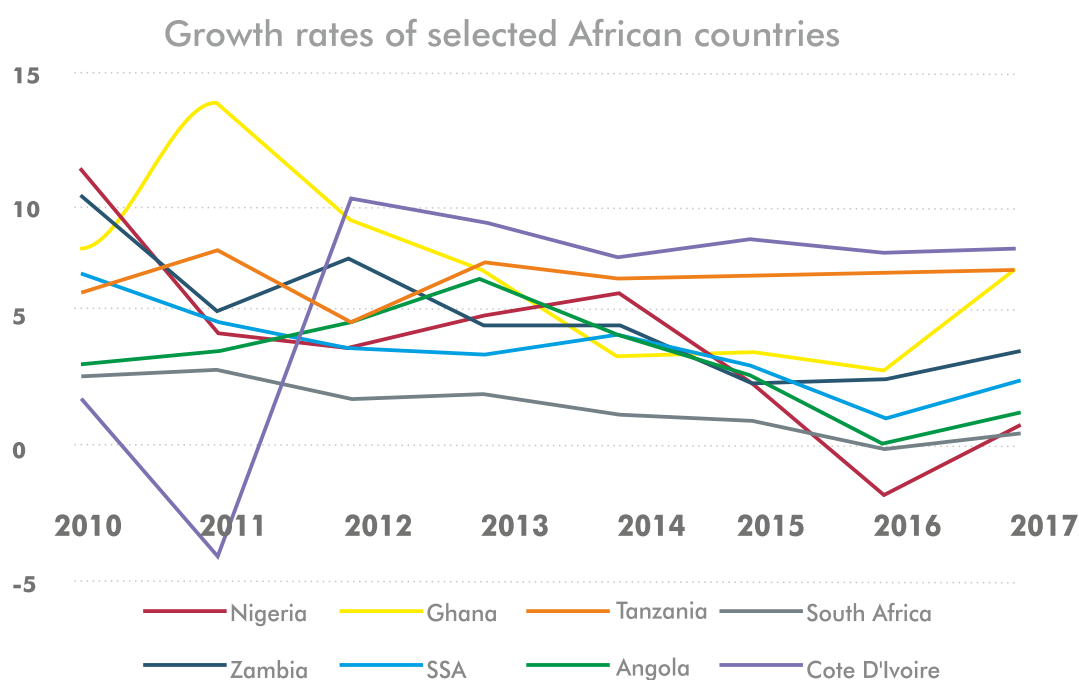
Kenya's growth performance, above 6% will be supported by increased public investment, solid consumption and a closer integration in the East African Community, but credit constraints following recent policy to cap commercial banks' interest rates and political uncertainty due to elections in August could limit growth momentum. Ghana's growth is also set to rebound strongly to over 7%, following peaceful transition of power to Nana Akufo-Addo after December 2016 elections. Reforms from the new government and expected increase in oil production from the new Tweneboa-Enyenra-Ntomme (TEN) oil fields will catalyse growth.

Rwanda, Tanzania and Ethiopia are anticipated to continue with their solid growth paces above 6% in 2017, sustained by policy reforms, improving business regulatory environment and infrastructure investments. Prospects for some Southern and Eastern African countries (Malawi, Zimbabwe, Lesotho and Mozambique), which were affected by El Nino driven drought in 2016 looks positive in 2017, but could be stifled by the La Nina driven floods in 2017.



Stabilising commodity prices and improving external environment will help to narrow the fiscal and current account deficits for the region to less than 4% of GDP. Inflation is expected to recede to levels below 10% in 2017, helping to boost consumption, and allowing central banks to loosen monetary policies and support economic activity.

However, public debt ratios are likely to remain elevated, with more than 70% of SSA countries expected to have debt levels above the region's average of 40% of GDP in 2017, raising concerns about debt sustainability. Only Ghana and South Africa issued Eurobonds in 2016, but we are likely to see more issuances in 2017, as countries try to close their financing gaps.



Source: IMF and World Bank

Risks to Monitor

The outlook for SSA is subject to some downside risks. Uncertainty about Brexit negotiations is likely to weaken trade, investment and development assistance to Africa in 2017. Another potential storm in 2017 relates to U.S policies on Africa under Trump administration. Clouds of uncertainties are lingering around the Africa Growth and Opportunity Act (AGOA) trade agreement, the President's Emergency Plan For AIDS Relief (PEPFAR) funding and the Power Africa initiative, as the Trump administration could pull the plug on these programs. Also the prospects and pace of further interest rate hikes in the US in 2017 could reignite risk aversion

and tighten global financial conditions, further raising the cost of financing in SSA. The slowdown in China remains a concern, with possible disorderly unwinding of the housing market likely to spark hard landing fears in 2017, complicating the rebalancing process and dampening Africa's recovery momentum.

SSA's heavy elections calendar in 2017 including Kenya, Angola, DRC, Rwanda, Senegal, Sierra Leone and Liberia need to be monitored closely. Tensions are rising in DRC following the expiry of Kabila's term on December 19, amid attempts to extend to third term. In Kenya, Liberia and Sierra

Leone, elections could possibly delay plans to consolidate fiscal positions and the needed economic adjustments. In East and Southern Africa, possible La Nina driven floods in 2017, which reflects a pendulum shift from the El Nino drought in 2016, could affect infrastructure and undermine agricultural production.

Growth is rebounding, but it needs to be sustained. African countries need to accelerate diversification of their economies to build resilience against external shocks, improve business environments and invest in infrastructure to sustain growth.

Commodities Outlook

By Dr Jeremy Wakeford, Quantum Global Research Lab

In general, most commodity prices are expected to remain relatively steady or pick up slightly over the coming year, as global demand is expected to firm up somewhat on the back of faster economic growth.

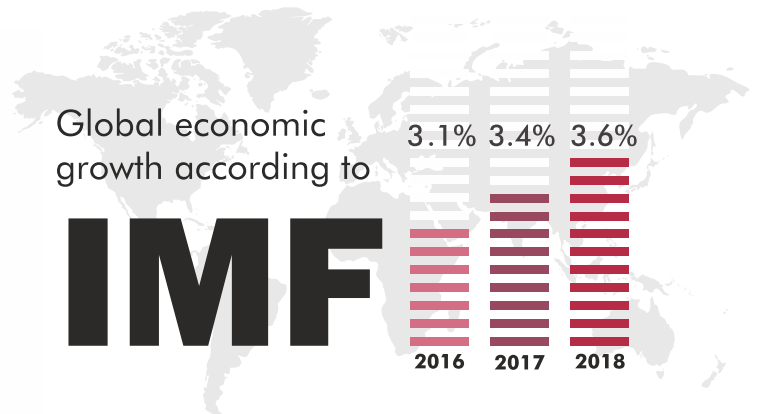
Oil prices have been given a boost by the recent announcement by OPEC and a group of other oil exporters that they would collectively cut production by nearly 1.8 million barrels per day (mb/d) from the 1st of January. Brent rose by about \$10 per barrel to around \$55/b by mid-December. Should OPEC+ follow through on its commitments, oil markets should come back into balance early in 2017. Prices could trade in a range of \$55-60 in the first half of the year, and possibly be capped at the higher end of the range by rising US shale oil production later in the year.

The prices of precious metals have declined since the election of Donald Trump in the US and the Fed rate hike, which have led to a stronger dollar and expectations of higher long-term bond yields.

The prices of most non-precious metals grew strongly in the past quarter, with several increasing by over 10%. The major exception was uranium, which accelerated its decline. The outlook is for little change in metal prices over the coming year, aside from a return to a declining trend in iron ore prices as demand remains soft in the face of global overcapacity.

Prices of all four major grains are expected to fall in the fourth quarter, but wheat and maize are likely to strengthen somewhat in 2017, while barley prices remain flat till later in the year.

Meat prices are not expected to show major changes in the year ahead. Lamb and poultry are likely to be steady, while beef prices could ease slightly and pork prices are expected to follow a seasonal pattern with a peak in third quarter.



The near-term prospects for beverage prices are mixed, with a slight rise expected for coffee and tea but a somewhat pronounced decline for cocoa beans.

The outlook for timber prices is stable over the next few years as gains in demand are expected to be matched by expanded supply.

The IMF's All Commodities Price Index, in **figure X1**, rose to a 15-month high in October, before dropping back slightly in November. The overall index gained 4% from August and is up 17.6% since last December. Meanwhile, the non-energy price index reached a 17-month high in November, having risen 3% in the past four months and 12.4% since last December.

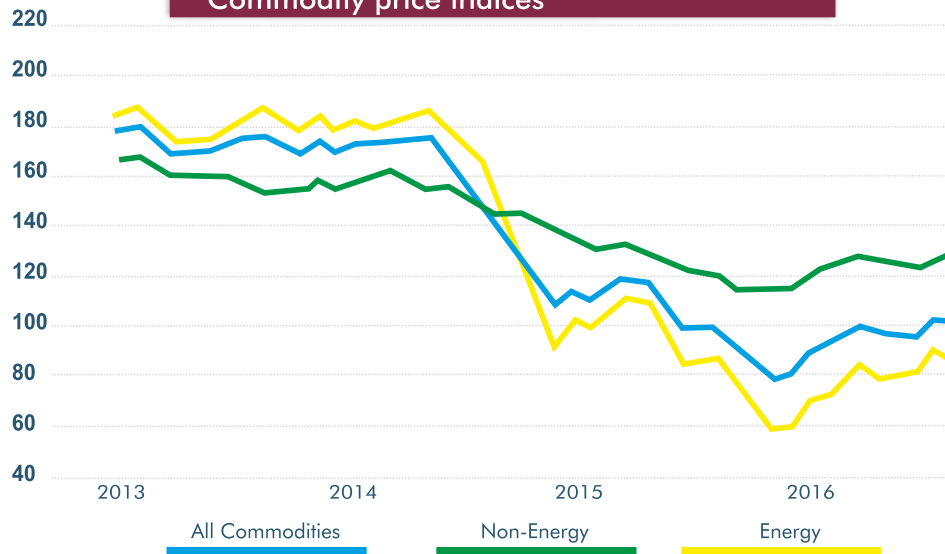
Meanwhile, the non-energy price index reached a 17-month high in November, having risen 3% in the past four months and 12.4% since last December. The energy price index, which comprises oil, natural gas and coal prices, jumped to the highest level since mid-2015 in October before paring some of the gains. The energy index climbed 22.6% in the 11 months to November, and is set to rise further in December on the back of stronger oil prices following the OPEC supply cut deal.

The IMF expects global economic growth to increase from 3.1% in 2016 to 3.4% next year, and further to 3.6% in 2018. OECD growth is projected to accelerate slightly to 1.8% in 2017, helped by the incoming Trump Administration's proposed infrastructure spending plan. On the other hand, China's growth is expected to continue decelerating over the coming five years as the economy matures and restructures. Nevertheless, China's manufacturing Purchasing Managers Index (PMI) has been above 50 since July, indicating expansion in industrial activity. India is on course to be the fastest-growing major economy, and will play an increasingly important role in generating new demand for a wide range of commodities.

The prices of most non-precious metals in the past quarter

↑ 10%

Figure X1:
Commodity price indices



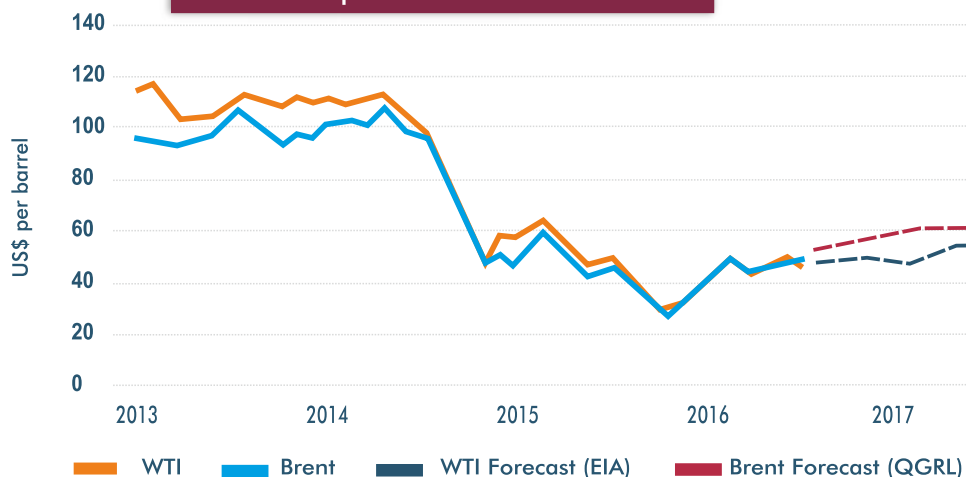
Brent crude oil spot prices have averaged between \$44/b and \$49/b since May, and averaged \$45/b for the month of November.

In its December Short Term Energy Outlook, the US EIA forecast that Brent crude will average \$51.7/b in 2017, up from an average of \$43.5/b in 2016. As a result of growing draws on oil inventories in the latter part of 2017, the EIA expects the price of Brent crude to rise to about \$58/b in 2017Q4. The World Bank's latest forecast expects an average crude oil price of \$55.2/b in 2017. The IMF's October forecasts put oil at \$49.9/b in 2017Q1, rising gradually to \$52.2/b by 2017Q4. Both of these agencies' forecasts were made before the OPEC+ supply cut was announced.

However, since OPEC+ announced their planned production cut amounting to a combined 1.8 mb/d for 2017H1, Brent crude has risen to over \$55/b. Should the supply cuts materialise, it seems likely that oil will trade in the \$55-60/b range over the coming 6 months or so. The outlook for prices in the second half of 2017 depends on a multitude of uncertain factors, including whether OPEC+ extends the production cut, the response of shale oil drillers, the Trump Administration's economic and foreign policies, and the health of the Eurozone and Chinese economies, amongst others.

Figure X2, shows the crude oil price trends and forecasts.

Figure X2:
Crude oil prices and forecasts



Rush for Africa's Digital Financial Services

By Prof. Mthuli Ncube, Quantum Global Research Lab

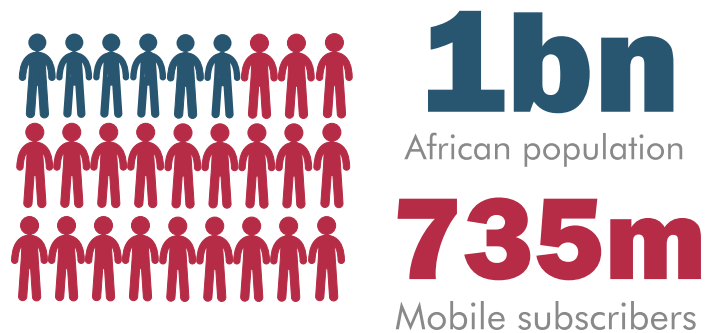
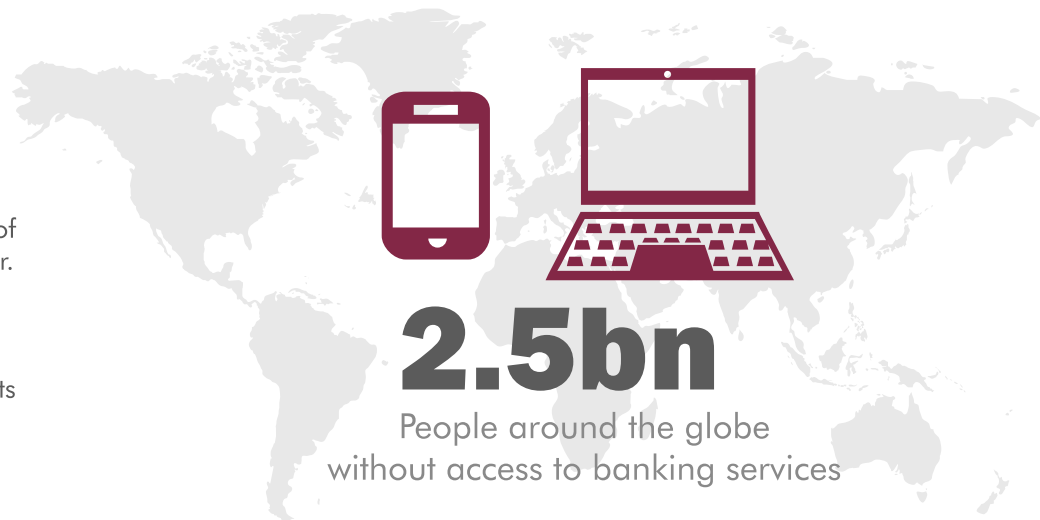
There are roughly 2.5bn people around the globe in lower- and middle-income countries who have no access to banking services. The potential for the expansion of digital financial services, which includes mobile banking and all electronic means of providing financial services, is clear. Africa, with a population of more than 1 bn, of whom around 735m are mobile phone subscribers, is one of the key international markets for digital financial services.

There are around 203m registered non-bank mobile money accounts in the world, almost half of which are in sub-Saharan Africa, with East Africa accounting for the highest share. At least 19 African countries from across the continent have more registered mobile money accounts than bank accounts.

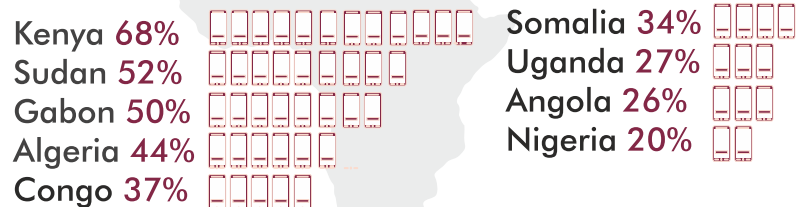
A number of factors such as mobile phone penetration, financial and conventional infrastructure development, population density, regulation, and the appetite of private players to pursue new initiatives have driven variation in mobile financial services.

The growth of mobile financial services

The high proportion of the African population that has no access to formal financial services has fuelled demand for mobile phones and mobile financial services. In most African countries, mobile banking is taking services to remote areas where conventional banks have been physically absent or too expensive to operate. Subscribers can now open accounts, check balances, pay bills, transfer money, and buy everyday essentials through their mobile phones.

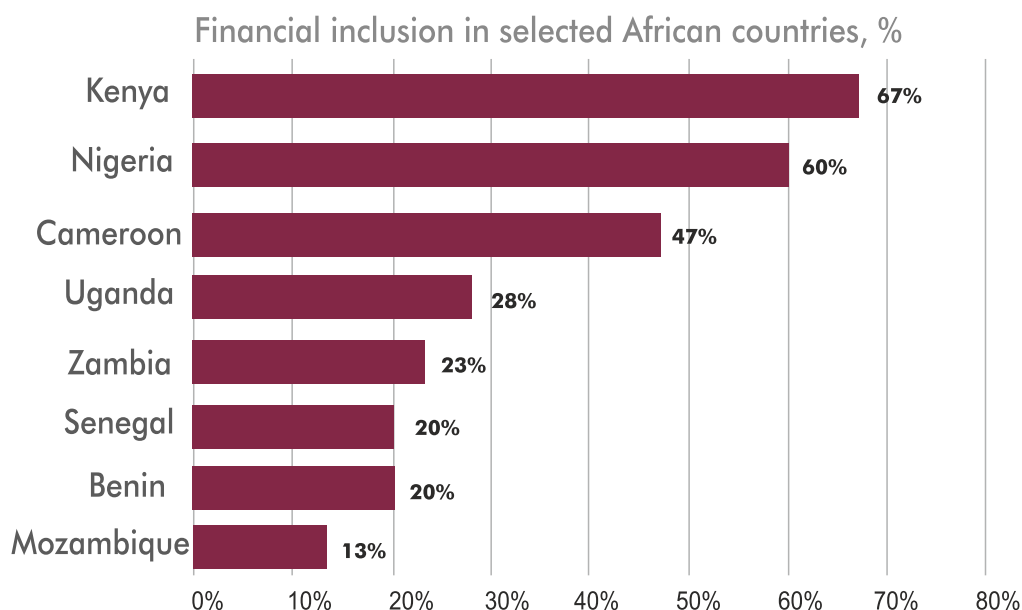


Countries with Highest Use of Mobile Financial Services in Africa



Mobile financial services offer more opportunities for partnerships between banks and non-bank financial institutions. In many African countries, banks and multinationals are also competing to tap the market of the unbanked population. A necessary condition for the expansion of mobile banking is for regulators, especially central

banks, to implement supportive regulatory regimes. The depth of financial inclusion across Africa varies considerably. Nigeria, the most populous country and largest economy in sub-Saharan Africa, has one of the highest rates of financial inclusion, with a 60% share of the adult population using formal financial services.



However, Nigeria's regulator does not allow for multinationals to offer services directly to consumers. This is likely to be hindering market growth.

In Cameroon, only banks can offer digital financial services directly. There are 2.7m registered users, and the financial inclusion rate is 47%. However, 80% of banks' loan portfolio is comprised of large companies rather than retail customers. These figures reveal that there is a lack of willingness on the part of banks to pursue a mass market strategy through either digital financial services or traditional means. Multinationals are now partnering with banks to offer digital services in the country.

Mobile banking supports financial inclusion

Kenya's high rate of financial inclusion (67%) is supported by having the highest percentage (nearly 60%) of people over 15 years old who own a mobile banking account. The regulatory environment played a key role in 2007 when Safaricom, a telecommunications company, launched its M-Pesa initiative for mobile money transfers.

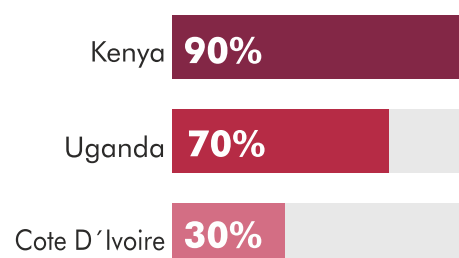
The regulator offered Safaricom a 'no objection' letter that allowed the company to innovate and pilot test its service without the confines of strict regulation.

The political violence that struck Kenya in 2008 may have also contributed to the expansion of the M-Pesa service. The disruption to transport networks and shut down of formal financial services, such as ATMs, meant that M-Pesa was the only way customers could transfer money. To date M-Pesa has over 30m subscribers, making it the most successful digital financial services initiative globally.

Kenyans receive nearly 90% of their remittances through mobile phones, followed by Ugandans at nearly 70%, and Ivorians at 50%. This again is well above the average for sub-Saharan Africa (around 30%), and comparable markets including South Asia and Latin America (around 5%). Successful development of digital financial services depends upon their ability to add value for all parties in the 'partnership ecosystem'. Tangible value must be delivered to customers, multinationals, banks, agents, financial institutions and other



% of remittances through mobile phones



companies, such as retailers or dealers. Finding technology and business models that work for all parties is challenging, as different actors have distinct business objectives. If there is failure to add value to any partner in this system, it may result in the collapse of the digital financial services business model. However, if the right models can be found, then Africa will lead the way in the world in pioneering digital financial services

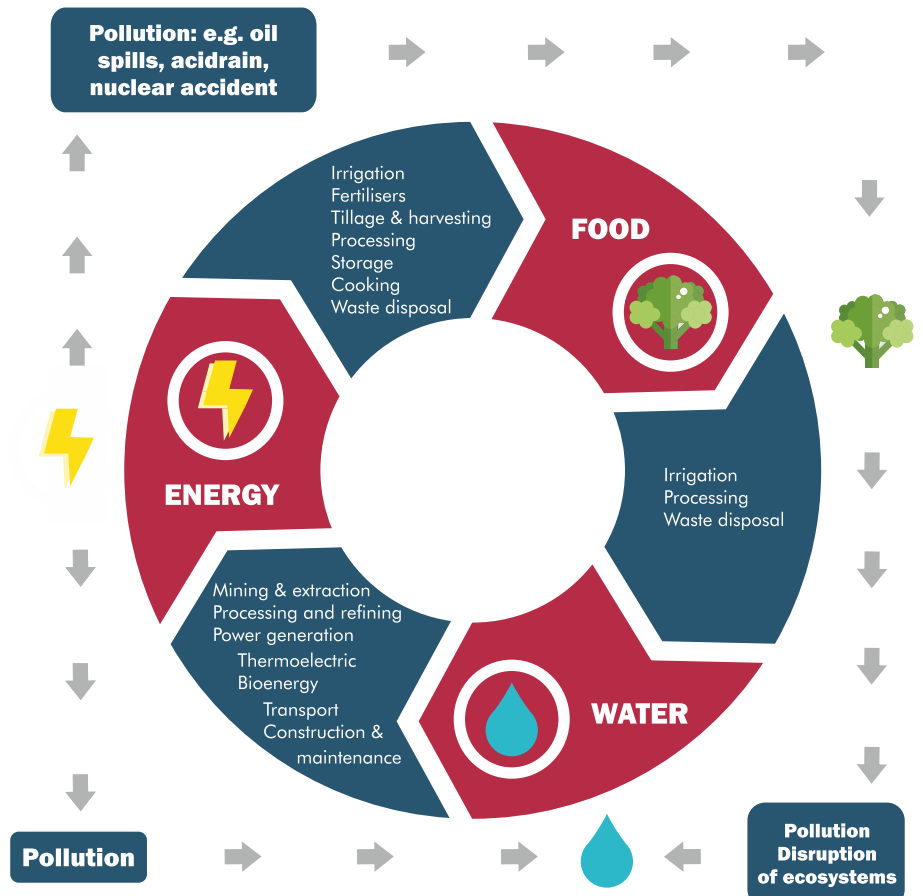
Building Resilience in the Energy-Food-Water Nexus

By Dr Jeremy Wakeford, Quantum Global Research Lab

The energy-food-water 'nexus' – defined as the linkages and interdependencies among these three systems that are vital for human welfare – is emerging as increasingly important in the global discourse on sustainable development. Treating energy, food and water systems independently of each other can result in critical system linkages and vulnerabilities being underappreciated and can possibly lead to the formulation and implementation of ineffectual or even counterproductive policies and measures. Researchers, policymakers and the international development community need to understand the dynamic interactions occurring within the nexus so that they can identify the key vulnerabilities and risks facing developing countries and formulate mitigation strategies to boost water, food and energy security.

Energy inputs are required at all stages of the food system value chain, from on-farm production to storage, processing and distribution to consumers. Energy is also needed for water extraction, treatment, conveyance, distribution and waste-water treatment. Water is essential for food production and processing, and for the extraction and processing of fossil fuels, hydropower generation and cooling in thermal power plants. Some agricultural crops are converted into bioenergy, which also depends on large amounts of water. Fossil fuel production and use, as well as high-input agricultural production, can have adverse impacts on water and soil quality.

The risks inherent in nexus interconnections are likely to intensify in the coming decades as a result of drivers like population



expansion, economic growth, urbanisation, tightening resource constraints, ecological degradation and intensifying impacts of climate change.

Nexus risk mitigation strategies should begin with efforts to build well-functioning institutions, horizontally and vertically coordinated governance systems, and integrated policy frameworks. Interventions will be more coherent and effective if they are designed and implemented within an 'inclusive green economy' paradigm that emphasizes resource efficiency and reduced environment impacts. A mix of policy instruments should be utilised, including public investment in infrastructure and innovation, economic incentives such as taxes and subsidies, regulatory mechanisms like

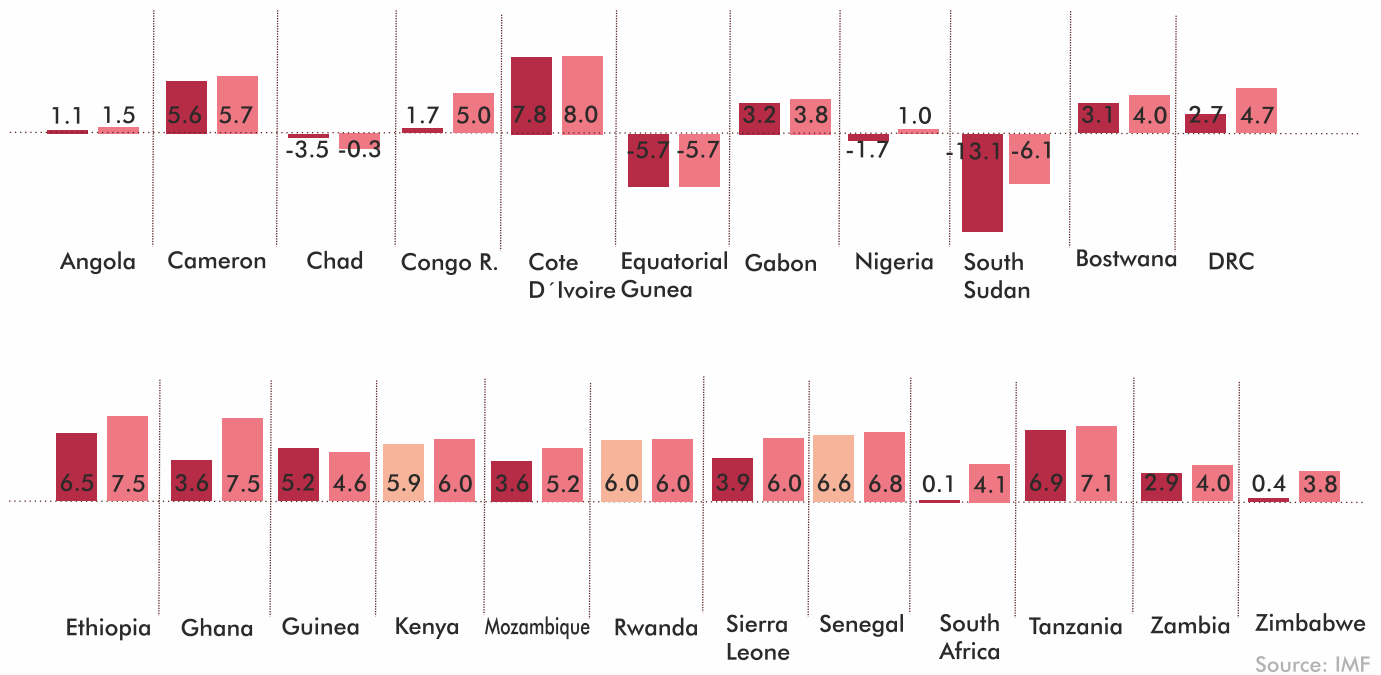
efficiency and emission standards, and education and awareness programmes. Promising technical mitigation measures include small-scale agroecological farming, renewable energy sources, protection and restoration of ecosystems, improving efficiency and reducing waste.

Policymakers should identify win-win solutions that harness synergies and maximise co-benefits across the energy-food-water nexus and confront unavoidable trade-offs by assembling relevant scientific information and involving stakeholders in consultative processes to inform policy decisions that result in socially inclusive and ecologically sustainable outcomes.

Key Data on Africa

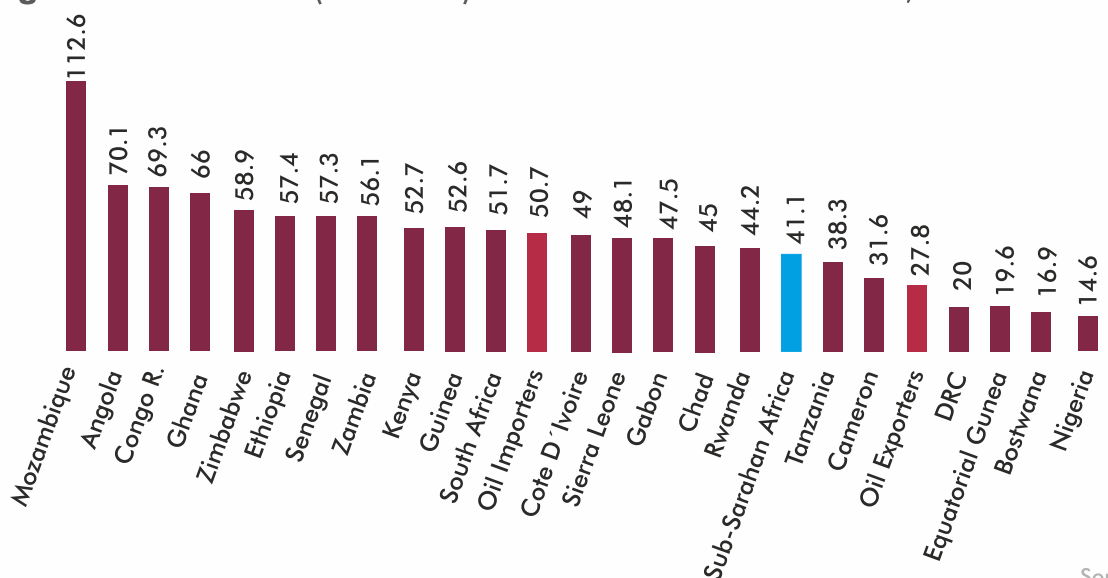
ECONOMIC GROWTH

Figure 1: Growth forecasts for selected African countries, 2016 and 2017



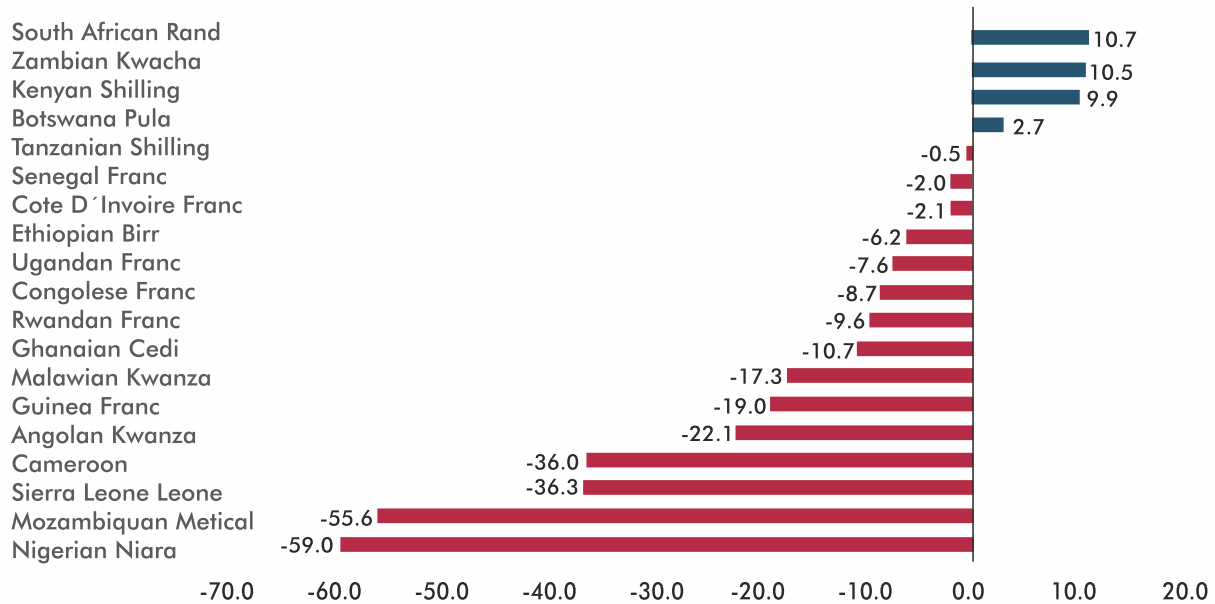
PUBLIC DEBT

Figure 2: Public debt (% of GDP) for selected African countries, 2016



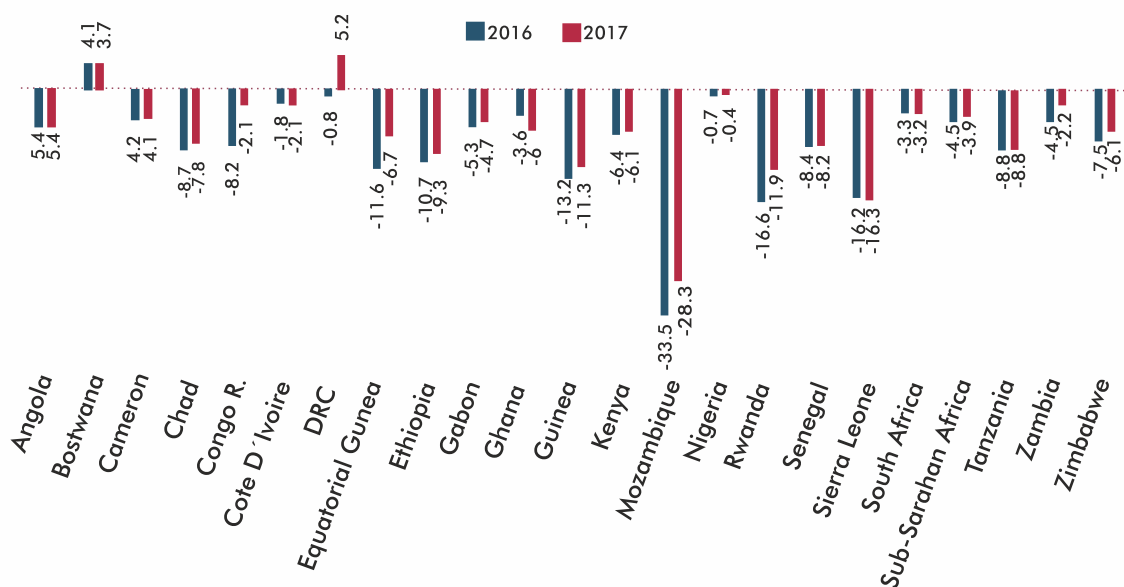
CURRENCIES

Figure 3: Changes of selected African currencies against the US\$ (january- december 2016)



TRADE BALANCE

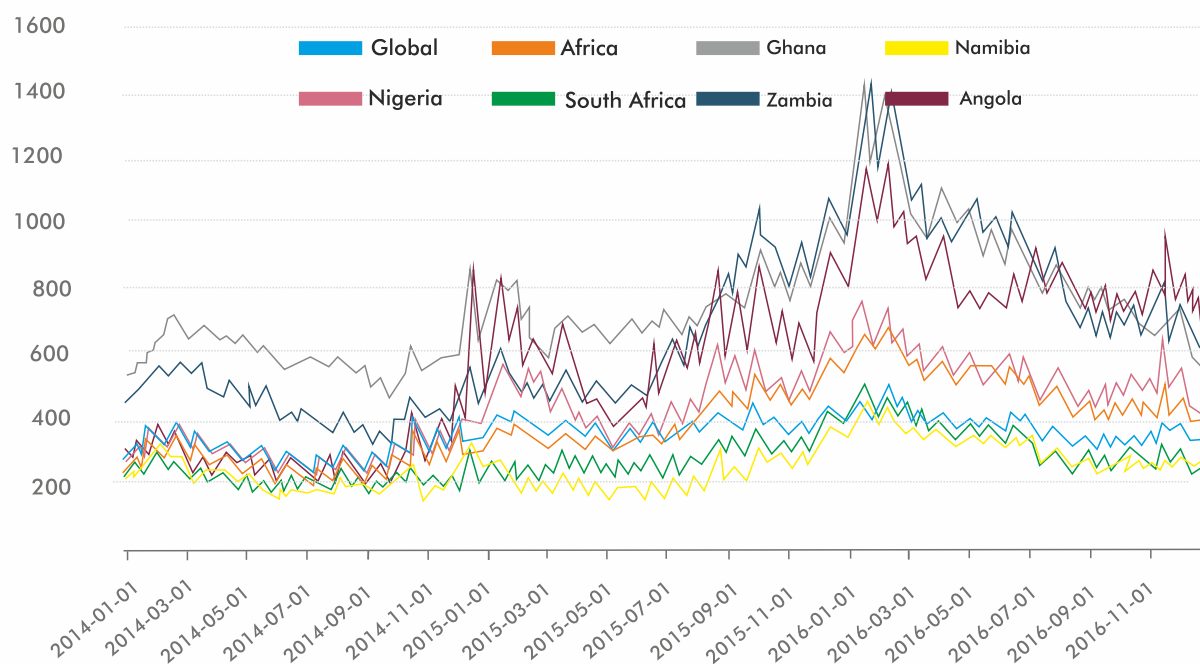
Figure 4: Current account balances for selected Africa countries, 2016 and 2017



Source: IMF

SOVEREIGN BOND YIELDS

Figure 5: Sovereign bond spreads for selected Africa countries



Source: Bloomberg

SOVEREIGN CREDIT RATINGS

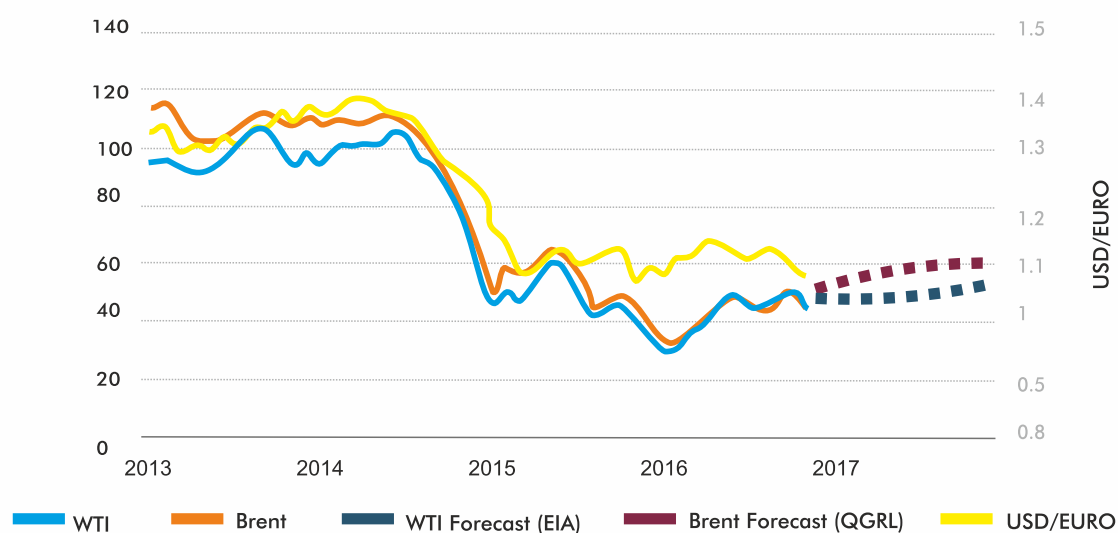
Table 1: Credit ratings of selected African countries

Country	S & P		Moody's		Fitch	
	Credit Rating	Outlook	Credit Rating	Outlook	Credit Rating	Outlook
Angola	B	Negative	B1	Negative	B	Negative
CoteD' Ivoire	Not Rated	Not Rated	Ba3	Stable	B+	Stable
DRC	B-	Negative	B3	Stable	B+	Stable
Ethiopia	B	Stable	B1	Stable	B	Stable
Gabon	Not Rated	Not Rated	B1	Negative	B+	Negative
Ghana	B-	Stable	B3	Stable	B	Negative
Kenya	B+	Negative	B1	Stable	B+	Stable
Mozambique	CC	Negative	Caa3	Negative	CC	Not Rated
Namibia	Not Rated	Not Rated	Baa3	Stable	BBB-	Negative
Nigeria	B	Stable	B1	Stable	B+	Stable
Rwanda	B	Stable	B2	Stable	B+	Stable
Senegal	B+	Stable	B1	Positive	Not Rated	Not Rated
South Africa	BBB-	Negative	Baa2	Negative	BBB-	Stable
Zambia	B	Negative	B3	Negative	B	Negative

Source: Bloomberg

OIL PRICE

Figure 6: Crude oil prices



Sources: EIA and QGRL Staff Estimates

MACROECONOMIC INDICATORS

Table 2: Selected macroeconomic indicators for Sub-Saharan Africa

	2010	2011	2012	2013	2014	2015	2016	2017
Real GDP Growth (%)	6.9	5.1	4.1	4.1	4.6	3.4	1.4	2.9
Real Per Capita GDPgrowth (%)	4.5	2.6	1.8	2.8	2.6	0.9	-0.9	0.5
Inflation (average, %)	8.2	9.5	9.4	6.6	6.4	7.0	11.3	10.8
Fiscal Balance	-37.4	-1.1	-1.8	-3.1	-3.5	-4.3	-4.6	-4.0
Total Public Debt (% of GDP)	27.7	28.3	28	29	31.7	37.1	41.1	42.1
Current Account Balance	-0.9	-0.7	-1.9	-2.4	-4.1	-5.9	-4.5	-3.9
Reserves (Months of imports)	4.2	4.6	5.3	5.0	5.6	5.4	4.6	4.3
Net FDI (% of GDP)	2.7	2.1	2.0	1.3	1.6	1.9	1.5	2.1

Sources: AfDB, IMF, World Bank

QG quantum global